User Manual

HDMI tool

DAH-HDMI1-4-4K2K

1 x 4 HDMI Splitter with
EDID Management

SAFETY AND NOTICE

The DAH-HDMI1-4-4K2K Splitter with EDID Management has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the DAH-HDMI1-4-4K2K should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power from the device before cleaning.

This product is made in Taiwan

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INTRODUCTION

The DAH-HDMI1-4-4K2K Splitter with EDID Management provides the most cost effective and advanced HDMI splitter solution on the market, by which the high definition video and high quality audio can be transmitted to 4 different locations without losing quality. DAH-HDMI1-4-4K2K supports all 3D formats and the true 4K2K video!

With built-in RS-232 firmware update mechanism, the compatibility among countless HDMI sources and receivers can be further guaranteed. With the upmost 36 bit deep color video and high definition audio support, DAH-HDMI1-4-4K2K is suitable for high quality HDMI broadcasting, digital signage and education applications!

FEATURES

- Supports HDMI 1.4a Deep Color & 3D / DVI 1.0 compliant
- HDCP 1.3 compliant
- Wide frequency range: 25MHz~340MHz
- Video bandwidth: 10.2Gbps
- Resolution up to 4K2K @30
- Supports default EDID and has ability to learn the EDID of displays
- Supports xvYCC, x.v.Color & Deep Color
- Mini-USB firmware update for expanding compatibility
- Supports Dolby Digital, DTS-HD and Dolby TrueHD audio
- Easy installation

i Automatic EDID learning will detect all the connected HDMI equipped monitors and analyze all the content of EDID. The EDID with minimal resolution support will be the reference EDID for incoming HDMI source players.

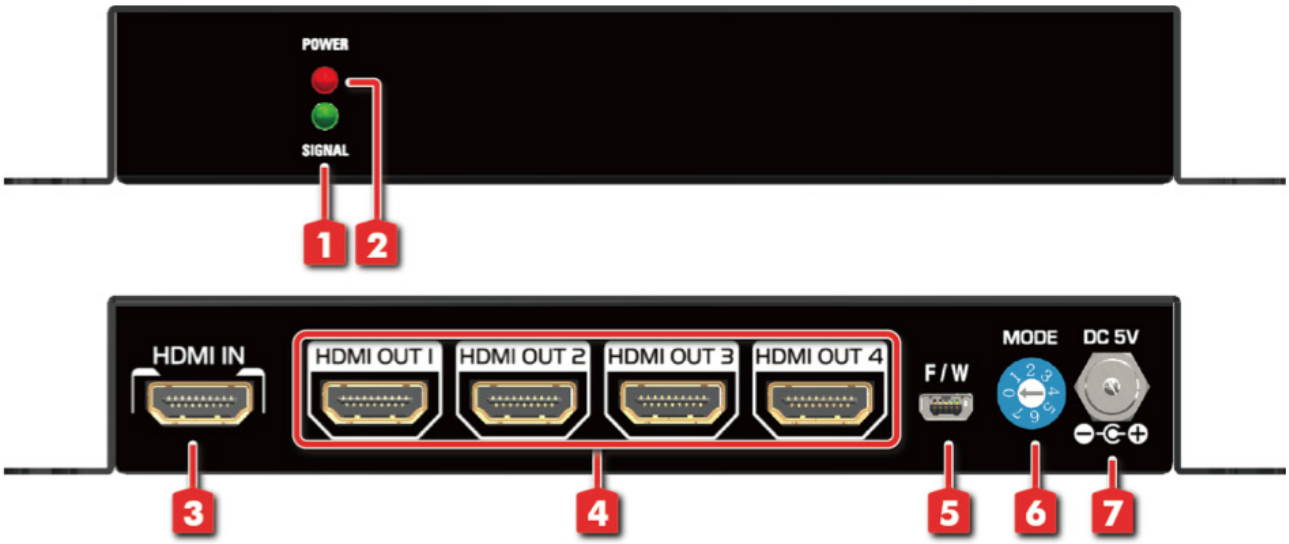
PACKAGE CONTENTS

- 1x DAH-HDMI1-4-4K2K
- 1x DC 5V2A wall wart
- 1x User Manual

SPECIFICATIONS

Role of usage		1 x 4 Distribution Amplifier (Splitter)
HDMI compliance		HDMI 1.4a Deep Color, full 3D & 4K2K
DVI compliance		DVI 1.0
HDCP compliance		HDCP 1.3
Video bandwidth		Single-link 340MHz [10.2Gbps]
Video support		Up to 4K2K @30
Audio support		DTS-HD Master Audio, Dolby TrueHD Dolby Digital, DTS, DVD-Audio, LPCM, SACD, MPCM
ESD protection		[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±2kV
PCB stack-up		4-layer board [impedance control differential 100Ω; single 50Ω]
Firmware update		Feasible via Mini-USB-port
ARC		N/A
HDMI 1.4 Ethernet		N/A
Input		1x HDMI [7.1ch audio & video]
Output		4x HDMI [7.1ch audio & video]
Input		1x HDMI [7.1ch audio & video]
HDMI connector		Type A [19-pin female]
Rotary control switch		EDID Mode selection
Mechanical		
Housing		Metal enclosure
Dimensions (L x W x H)	Model	154 x 83 x 25mm [6.1“ x 3.3“ x 1“]
	Package	264 x 170 x 77mm [10.4“ x 6.7“ x 3.“]
	Carton	430 x 358 x 291mm [16.9“ x 14.1“ x 11.5“]
Weight	Model	583g [20.5 oz]
	Package	1126g [2.5 lbs]
Fixedness		Wall-mounting case
Power supply		5V 2A DC
Power consumption		10 Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

PANEL DESCRIPTION



1. **Signal LED:** Signal LED indicator
2. **Power LED:** Lights on when device is ready
3. **HDMI IN:** Connect to a HDMI input source
4. **HDMI OUT1-4:** HDMI outputs to HDMI displays
   [HDMI OUT1: EDID Learn Default]
5. **Mini-USB:** For technical support only [firmware update]
6. **MODE:** 0 - F/W update mode
   1 - EDID Full-HD(1080p@60) - 24bit 2D video & 7.1ch audio
   2 - EDID Full-HD(1080p@60) - 24bit 2D video & 2ch audio
   3 - EDID Ultra-HD(4K2K@30) - 24bit 2D video & 7.1ch audio
   4 - EDID Ultra-HD(4K2K@30) - 24bit 2D video & 2ch audio
   5 - EDID HD(1080p@30)(1080i@60)(720p@60) -
   24bit 2D video & 2ch audio
   6 - Auto EDID analysis learning mode
   7 - EDID learning mode
   [Please use HDMI OUT 1port for learning EDID from display]

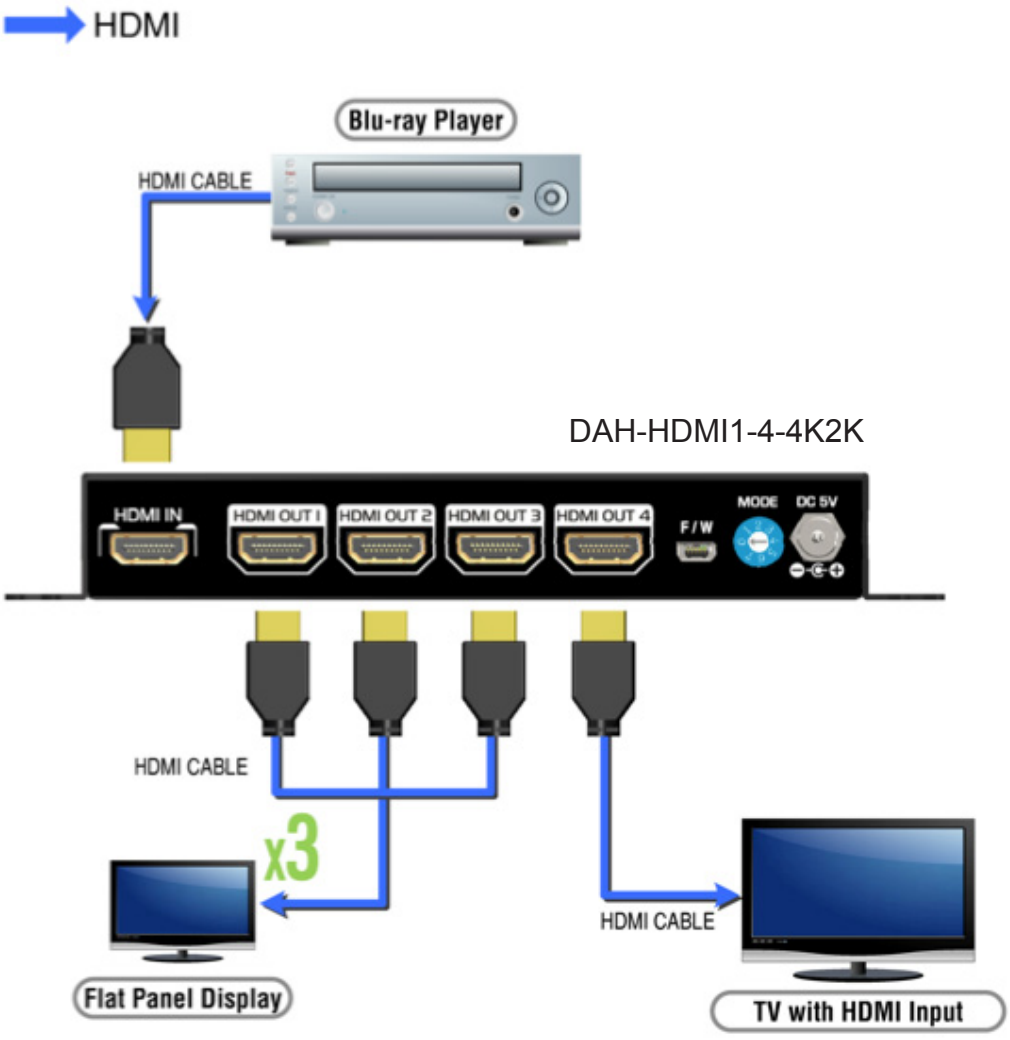
7. **+5V DC:** Connect to the +5V DC 2A power supply unit

HARDWARE INSTALLATION

Broadcasts HDMI signal to 4 HDMI displays

1. Switch off all devices, including monitors.
2. Connect to the receivers.
3. Connect an HDMI source (such as a Blu-ray Disc player) to the HDMI In.
4. Plug in 5V DC power supply.
5. Power on the HDMI monitors.
6. Power on the HDMI source.

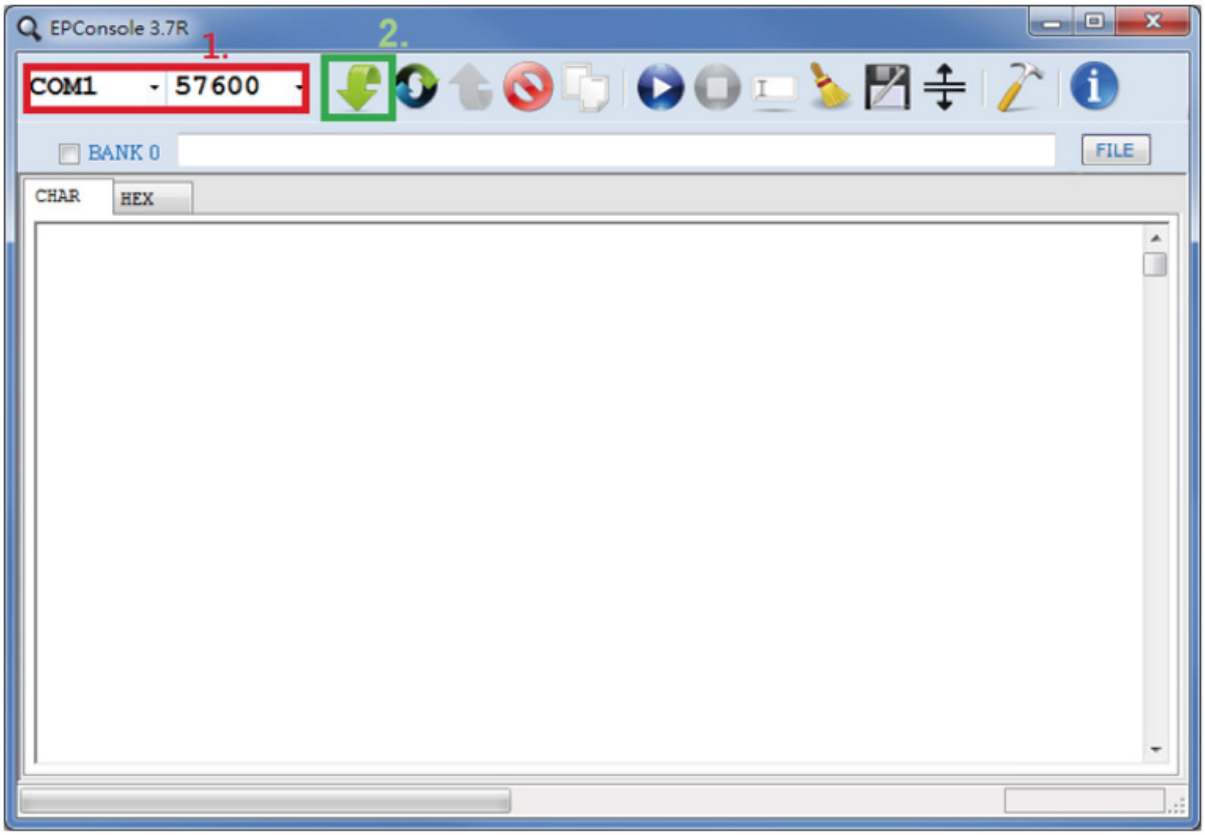
CONNECTION DIAGRAM



NOTICE

While connecting a new monitor to the splitter under mode6(auto EDID) & mode7(EDID learning), experiencing a short period of time without display might be expected. The splitter will do Automatic EDID learning which analyzes the newly connected monitor to see if the EDID for the HDMI input is necessary to update!

For firmware update through Mini-USB, users MUST turn the power off, set the dip switch to “ON”, and then connect an Mini-USB cable between PC and device. Open the firmware update software, **[1]** set the correct com port and baud rate (57600 is recommended), **[2]** click the “File” button to direct to the firmware HEX or BIN file, power on the device and press “Program MCU” symbol to firmware update. Once update process is done, please power off the device and set the dip switch back to “1”.upate process is completed! After firmware update is successfully accomplished, please unplug USB cable and power off the splitter!



WARRANTY

The SELLER warrants the DAH-HDMI1-4-4K2K free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge.

This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regaring theDAH-HDMI1-4-4K2K features and specifications is subject to change without further notice.

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